Minutes, 6/16/04 Tevatron BPM Upgrade Meeting Stephen Wolbers

This set of minutes, and all future minutes, are or will be deposited in the Beams Document Database as document number 792.

The agenda as announced consisted of:

- 1. Report from Bob and Steve
- 2. Update from jim/Dehong on the teststand
- 3. Reports from subproject leaders
- 4. Report from Jim Steimel
- 5. AOB
- 1. Report from Bob and Steve.
- Filters. The deadline for the filter bids was Tuesday June 15. No bids were received by the deadline. We had a discussion of various options to pursue. The main option is to contact vendors and find out why they did not bid -- what were the difficult specifications and are there any options for getting a bid with some relaxed specs. (Information since the meeting: Later in the day we heard that some vendors were in fact able to bid but did not get the information in on time. Two or three bids came by the end of the week.)
- Bob was using the A1 setup to study the abort gap. He will put it back to the normal setup for measuring p and pbar signals.
- Pizza. The project is invited out for pizza next Wednesday, June 23 after the weekly meeting.
- Shutdown tasks. The shutdown tasks include cabling work in the F sector of the tunnel, connection of all the pbar ends of the BPMs in the tunnel and of course all of the electronics installation in the service buildings.
- Milestones/schedule. There are two major milestones for the project in June. One is the delivery of the 4 modified EchoTek boards. The milestone is June 15 and we hope to see the boards during the week of June 21. The other is the final electronics design review and it is June 25. There are issues with the filters (see above).

Minor milestones include offline software spec (June 11), frontend DAQ implementation (June 10).

2. Reports from L2 Managers

Vince Pavlicke:

- Electronics design documentation will be completed soon.
- The timing board is moving along. Firmware is being developed. Boards arrive Monday. Assembly next week for the first 5 pilot boards.
- The filter baords are essentially ready to order. 5 pilot boards will be made.
- Cables will be tested soon. Various tests will be made, including attenuation and reflection. This will also be done with cables connected to Foam 8 cables.

Margaret Votava:

- Implementation of the front-end software continues.
- A second test stand is being created in FCC.

Dehong Zhang/Jim Steimel - test stand:

- Helping to build the second test stand.
- Has received the second to last version of the VME driver for the new EchoTek boards.
 - Preparing to help test the new timing card.
- Building components to provide fake beam signals with beam modulation and various beam conditions.

Tim Kasza:

- Stew Bledsoe will finish the layout of the filter board by the end of the week.
 - No new service building work recently.

Brian Hendricks:

- Has made comments on the draft software MOU.

- Brian asked when various components of the online software were required to be available. He will ensure that they will be ready on time.

Rob Kutschke:

- Rob showed some plots/measurements from the short-gate and long-gate antiproton measurements. He will write this up in a note, doc #1203.
 - A few highlights:

Rob measures a sigma of:

- 15.9 microns when doing a vector sum
- 6.9 microns when doing a scalar sum
- 6.9 microns when doing a position average

In addition the resolution gets better when more turns are averaged.

This was done with a vertical BPM. Horizontal measurements are not as good.

This is very encouraging.

Jim Steimel: Technical Coordinator Report

- At least 28 inches of space exists in most of the service buildings for the TeV BPM upgrade electronics.
- There are still some issues in the "C" service buildings to resolve to create sufficient space.

4. AOB.